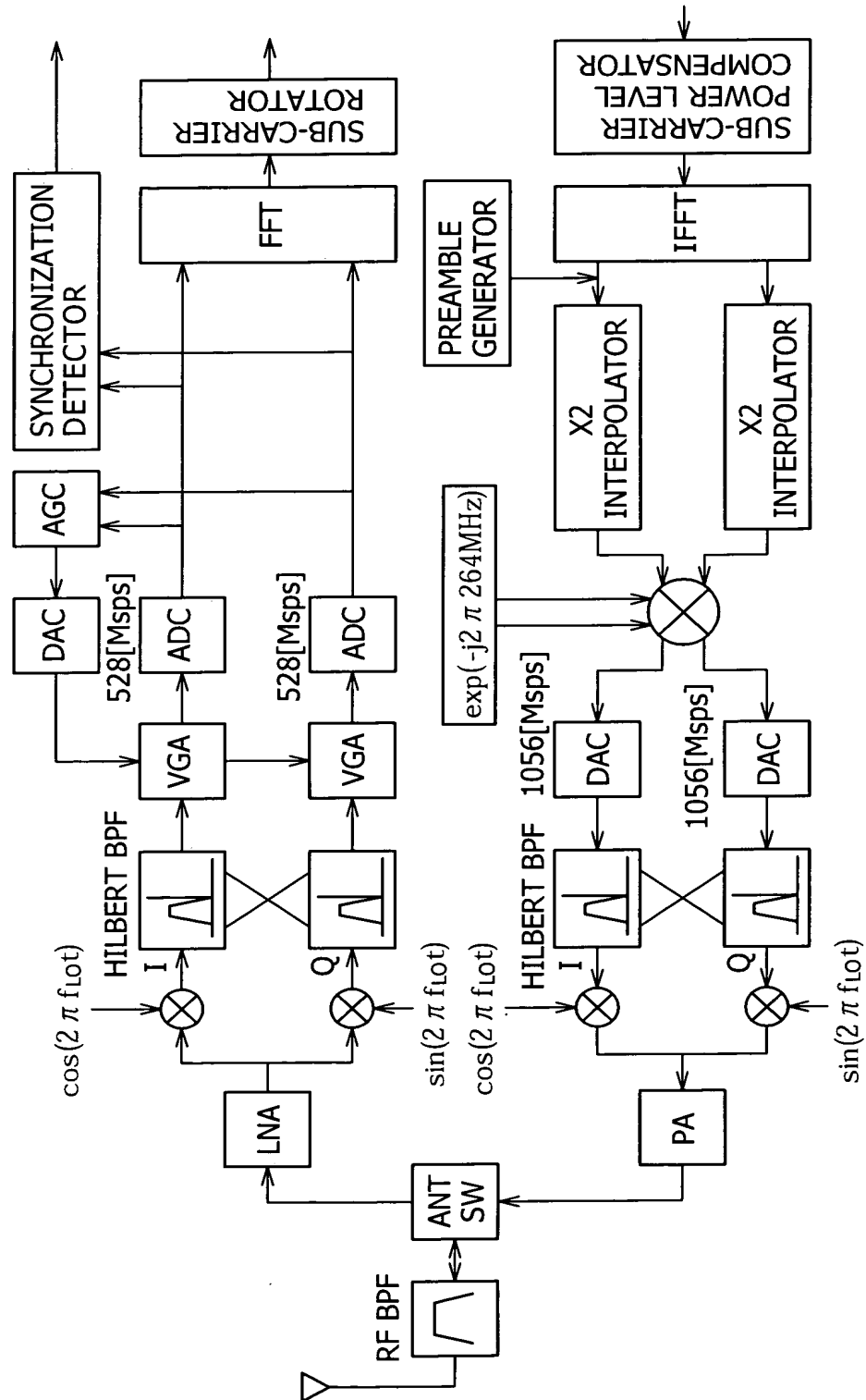


1/15

FIG. 1



2/15

FIG. 2

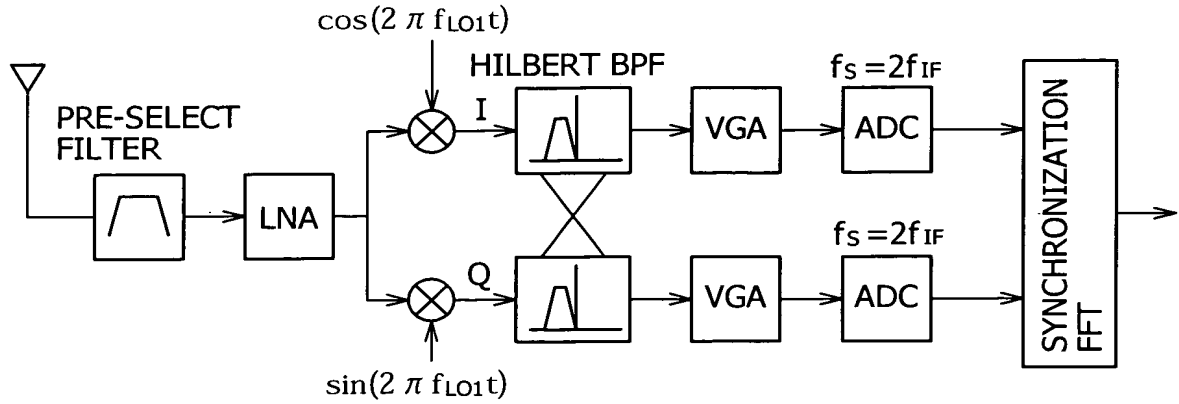


FIG. 3 A

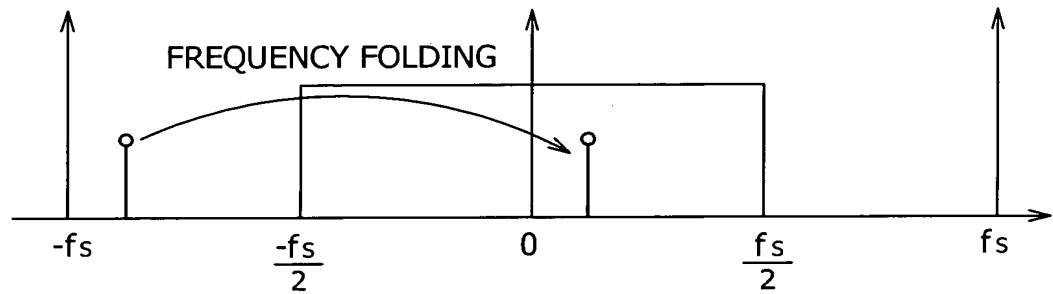


FIG. 3 B

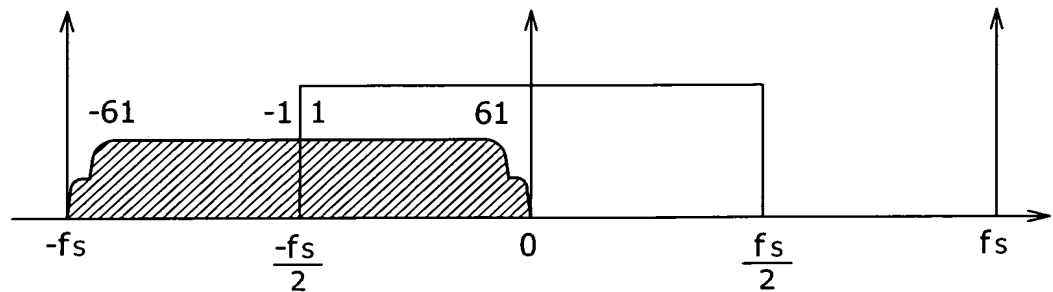


FIG. 3 C

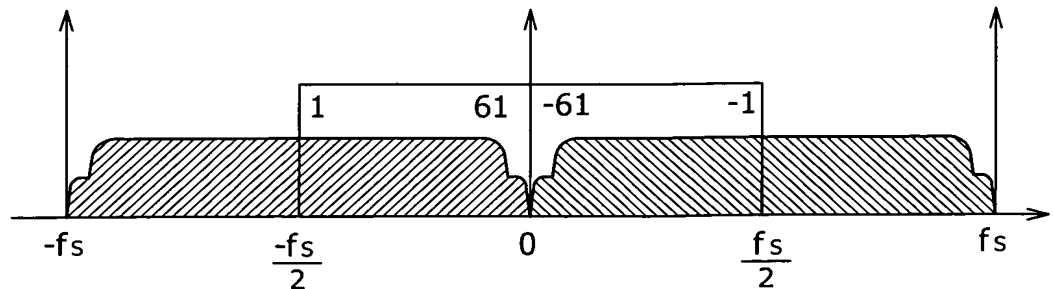


FIG. 4

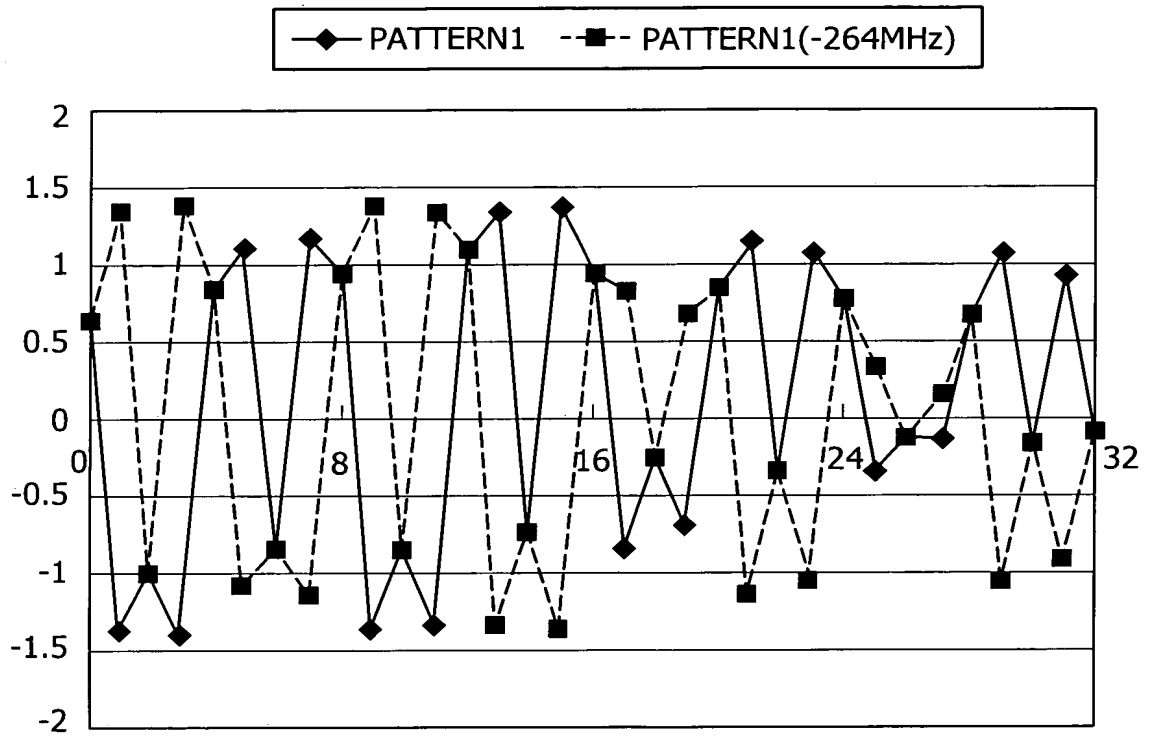


FIG. 5

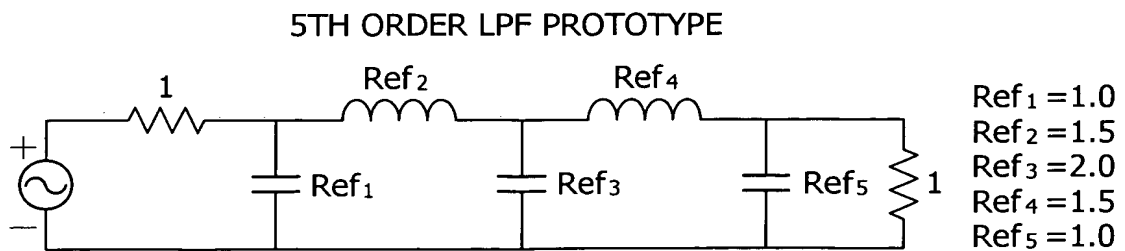
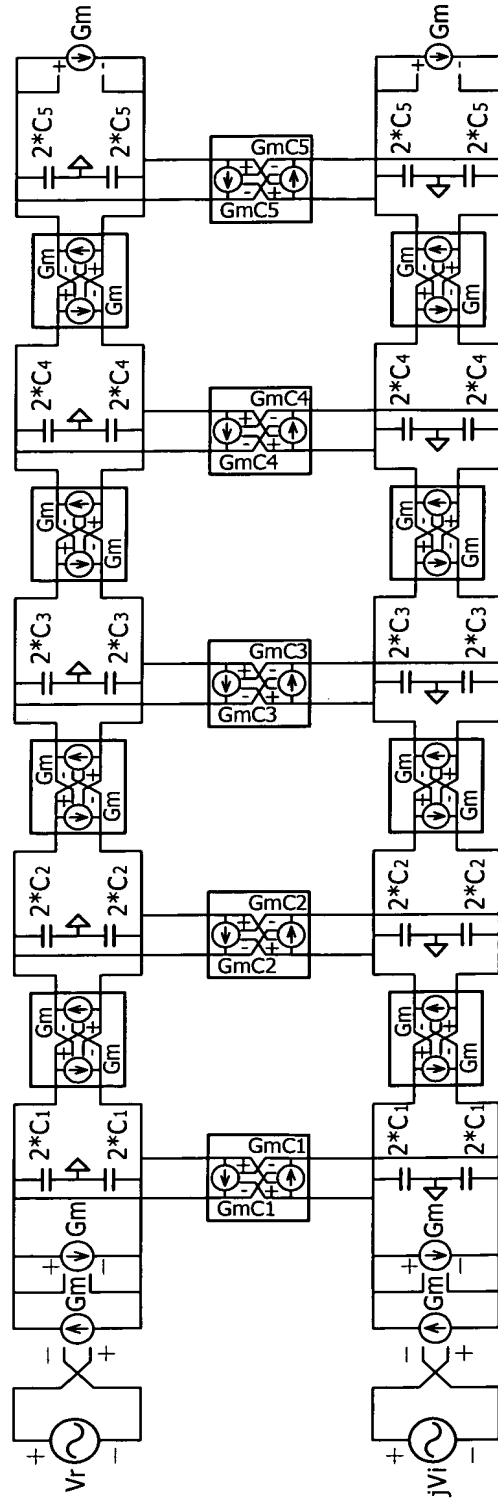


FIG. 6

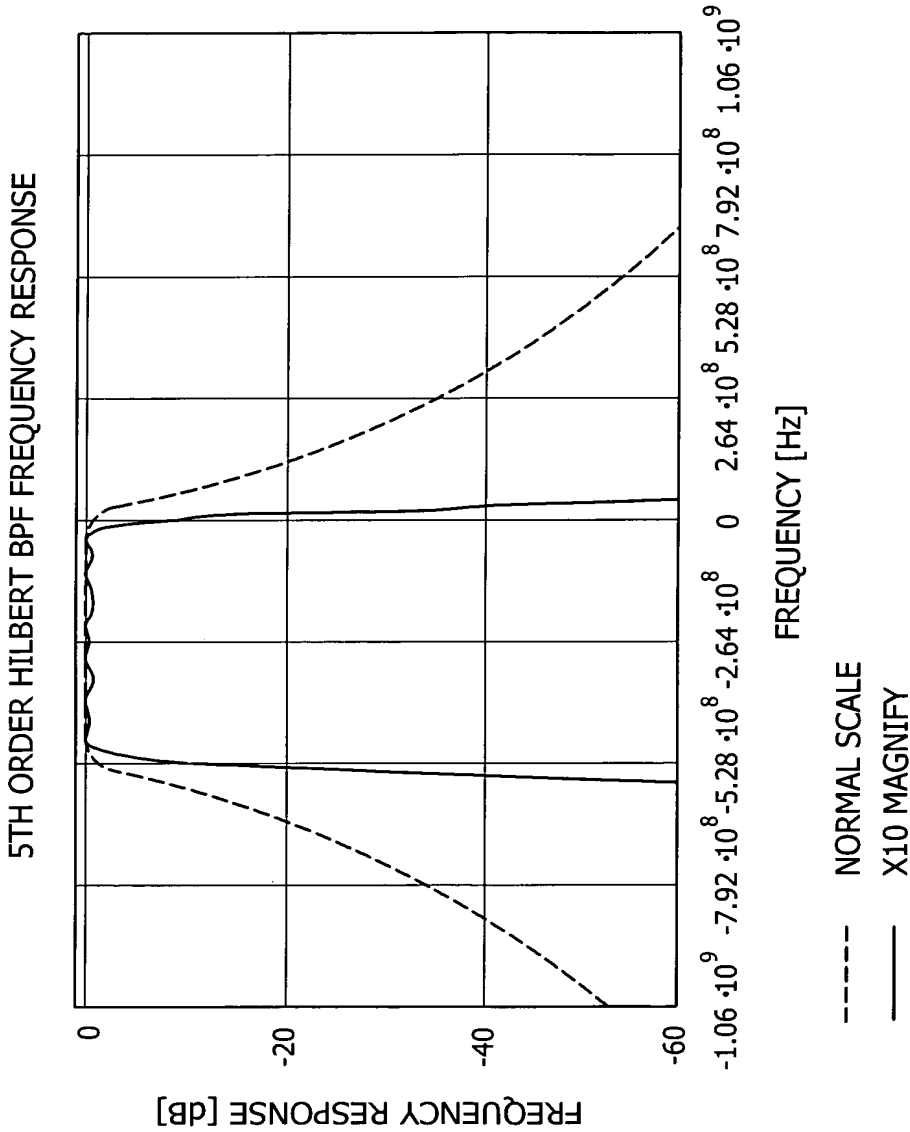
5TH ORDER HILBERT BPF



$$C_n = \text{Ref}_n \cdot G_m / \omega_c$$

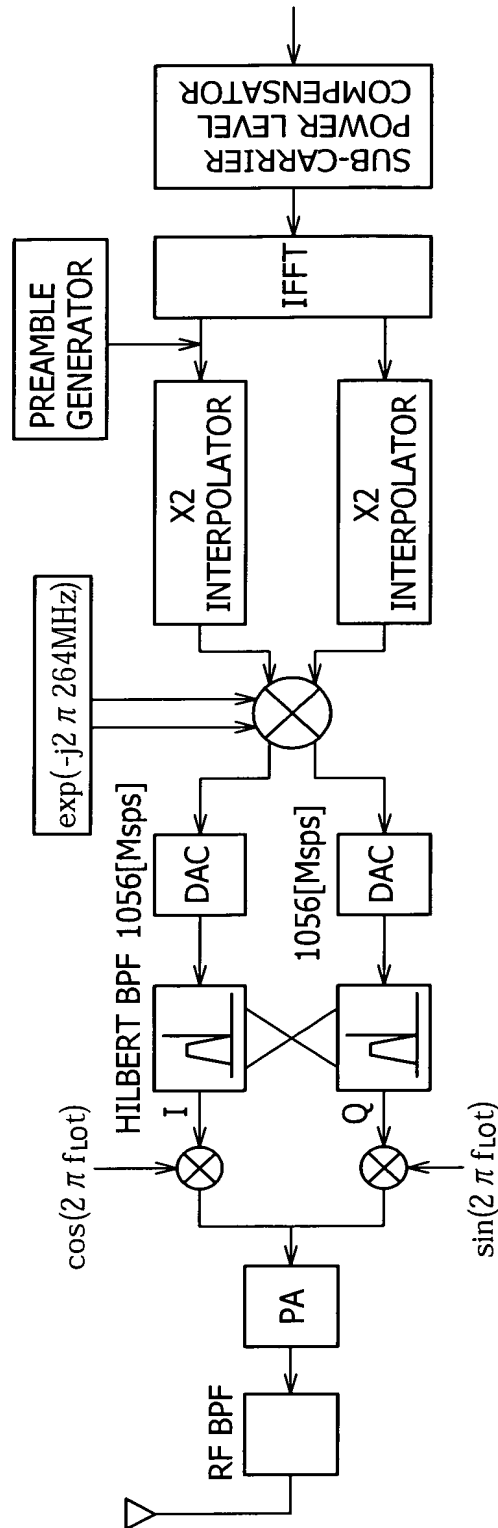
$$G_m C_n = \text{Ref}_n \cdot G_m \cdot \omega_0 / \omega_c$$

FIG. 7



6/15

FIG. 8



7/15

FIG. 9

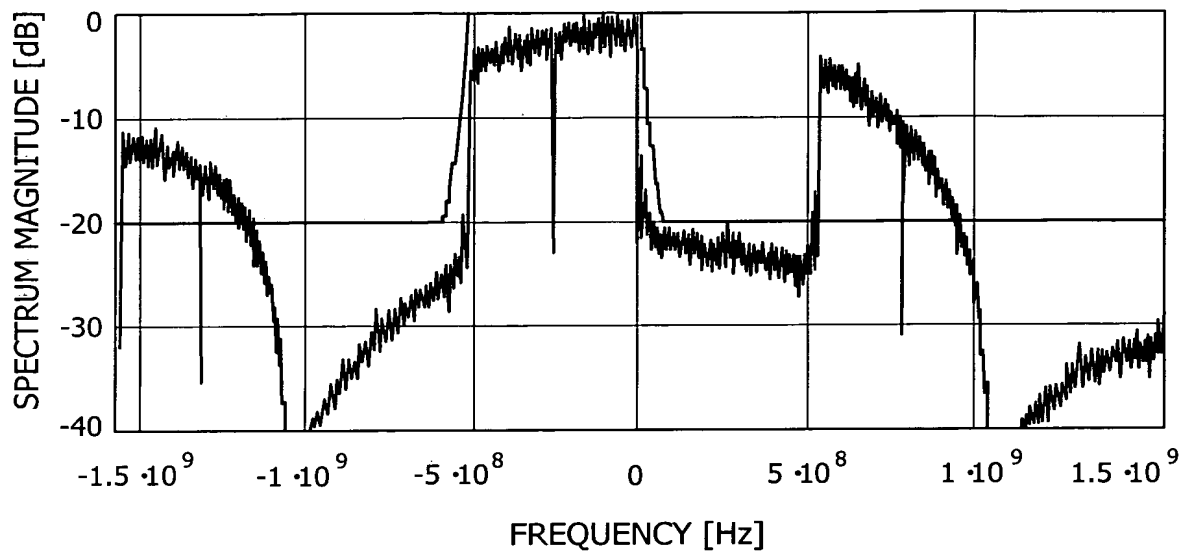
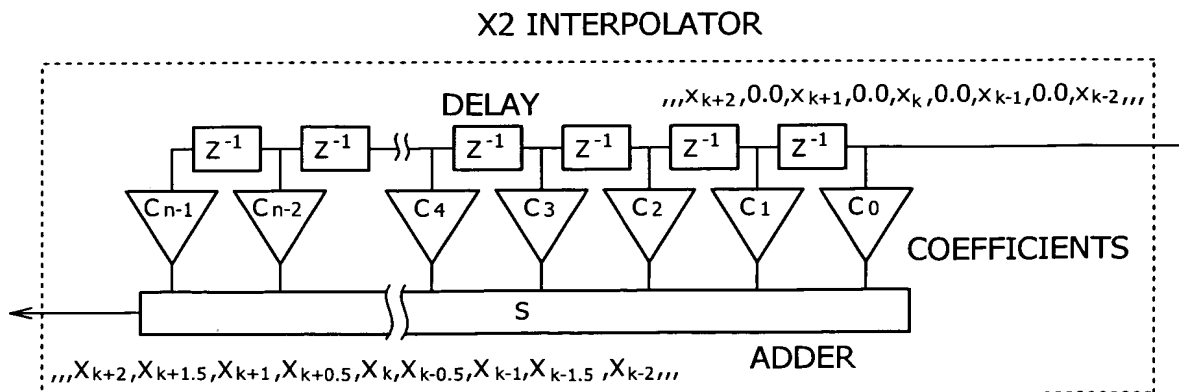


FIG. 10



8/15

FIG. 11

COMPLEX X2 INTERPOLATOR

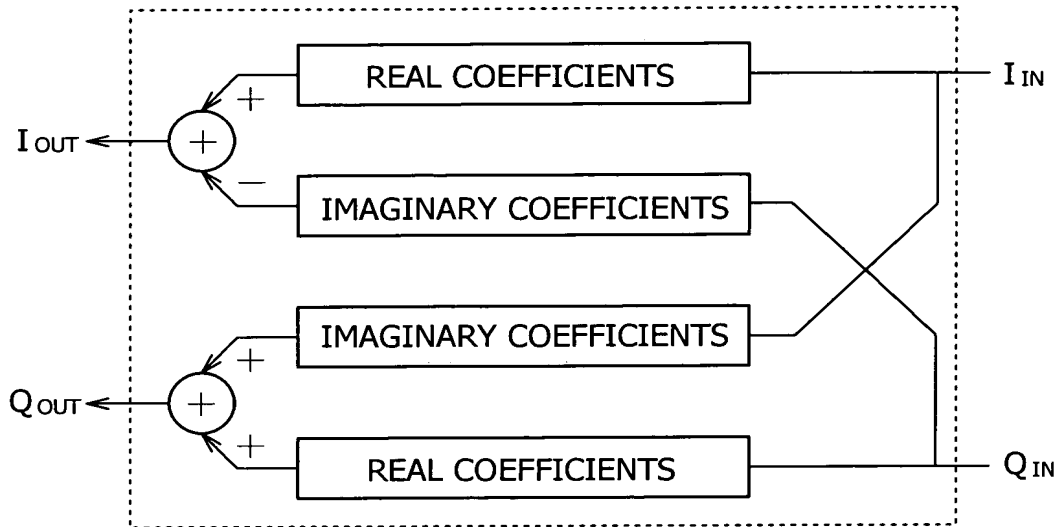
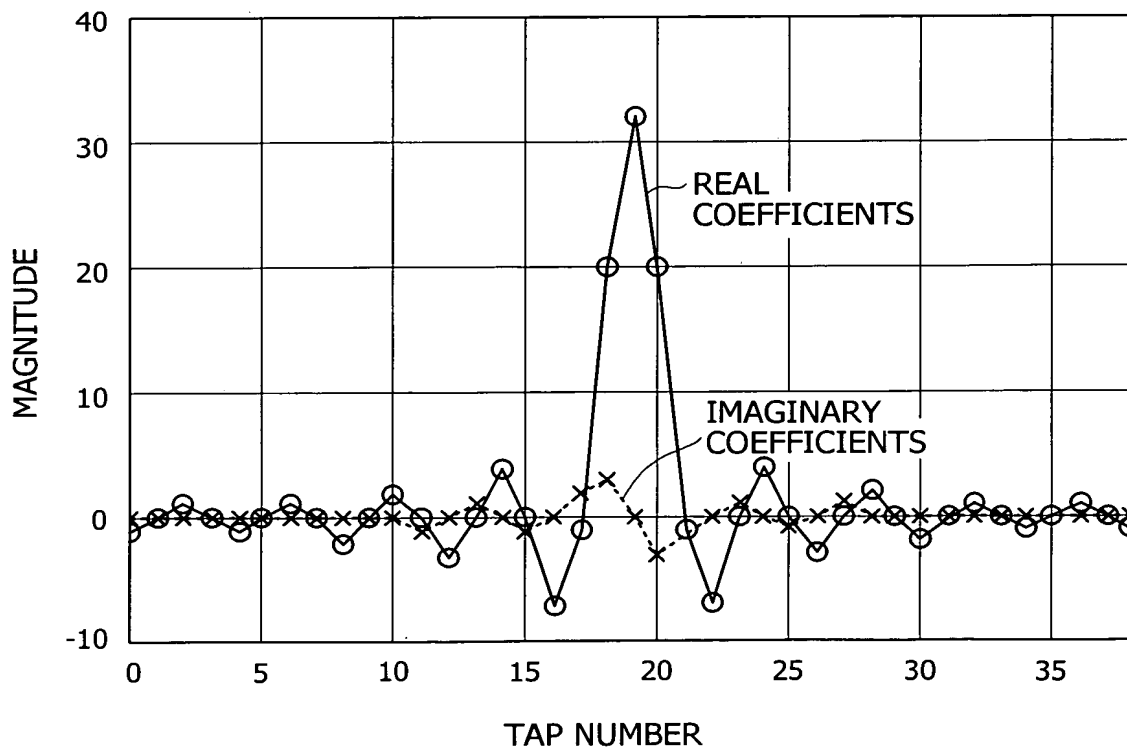


FIG. 12



9/15

FIG. 13

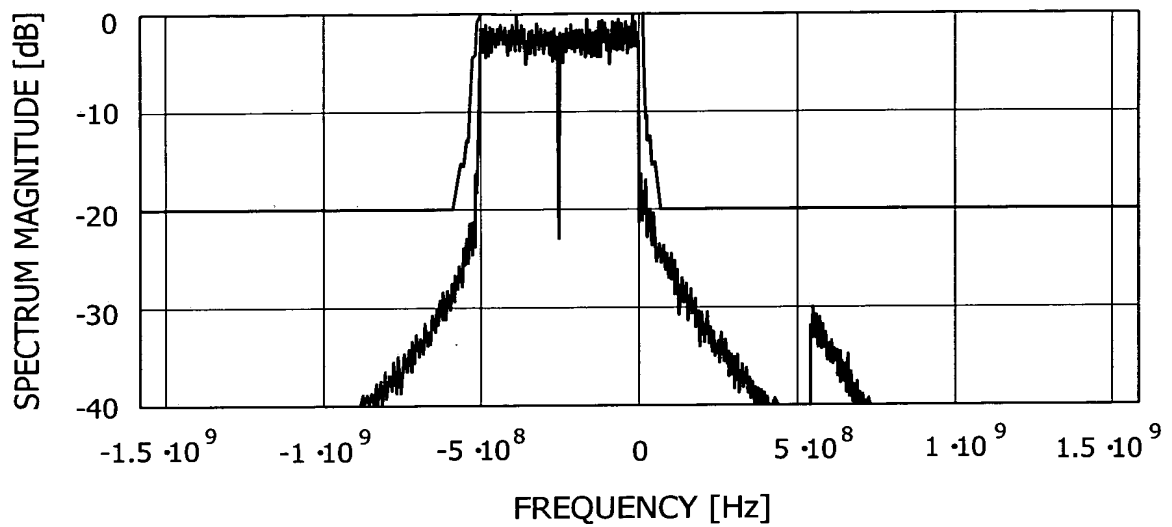


FIG. 14

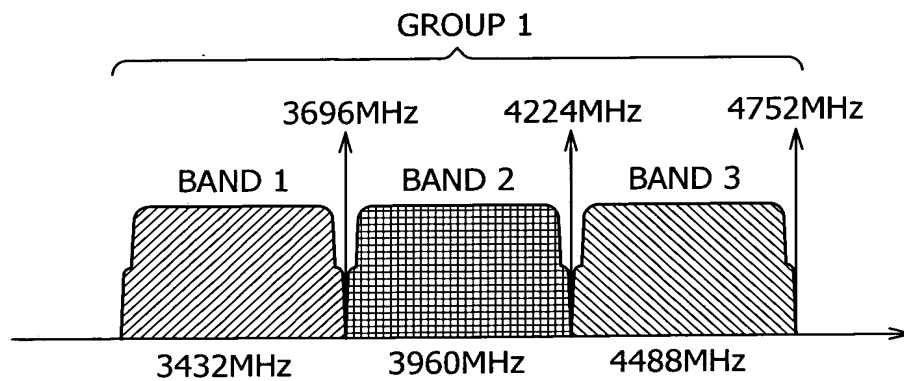


FIG. 15

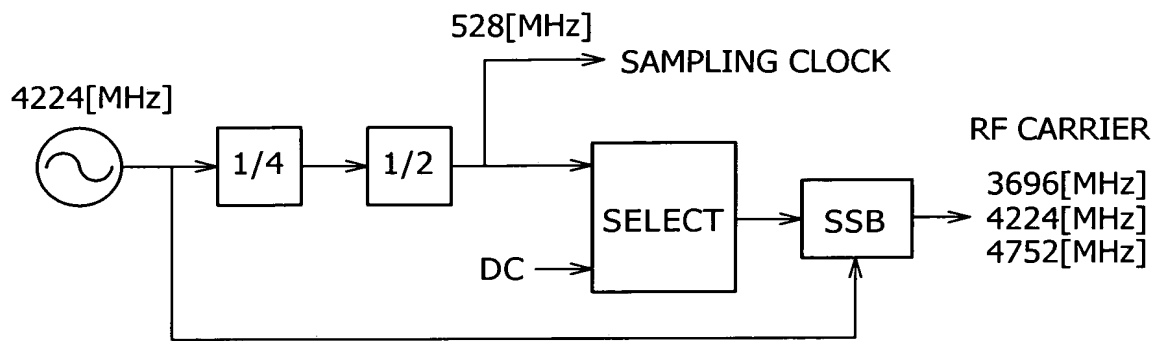


FIG. 16

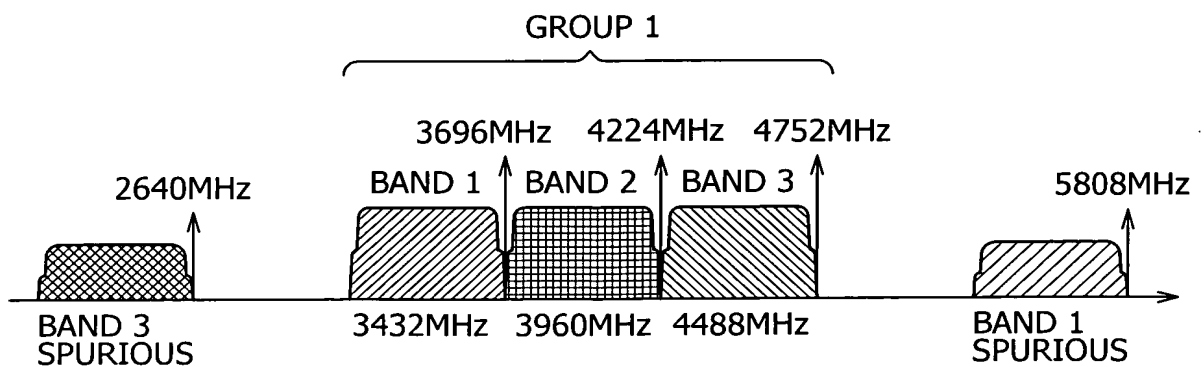
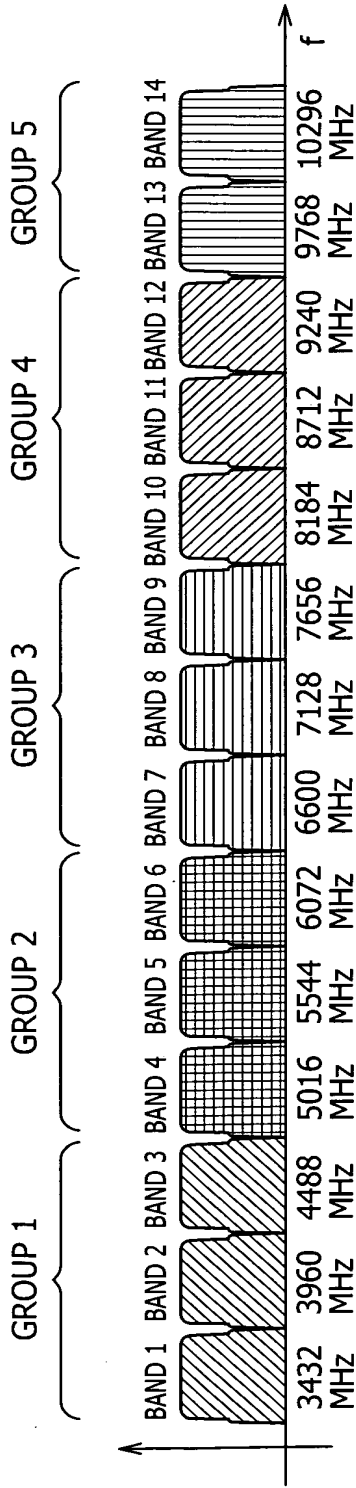


FIG. 17



12/15

FIG. 18

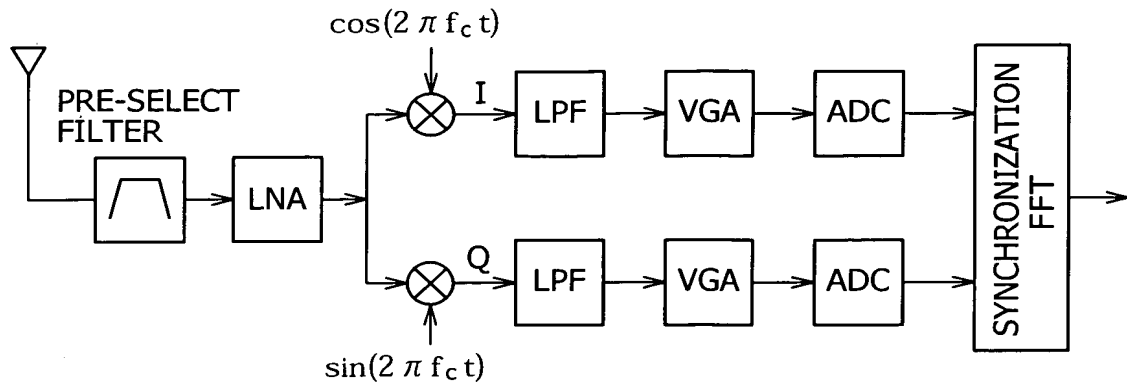


FIG. 19

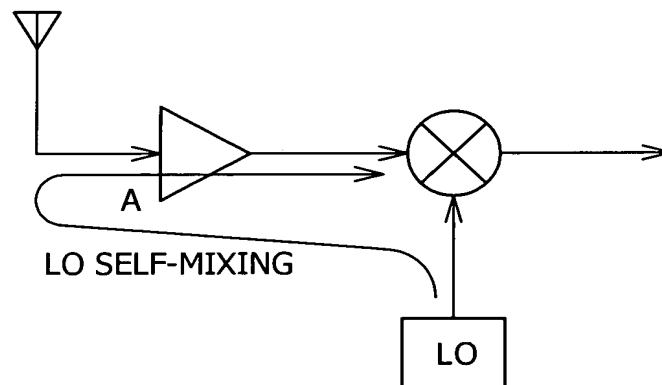
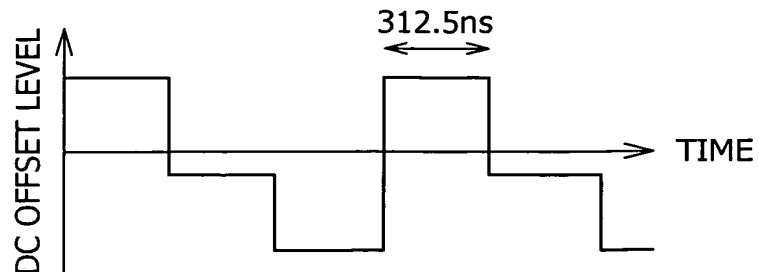


FIG. 20



13/15

FIG. 21

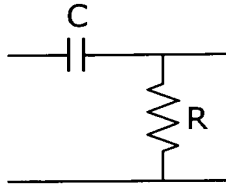


FIG. 22

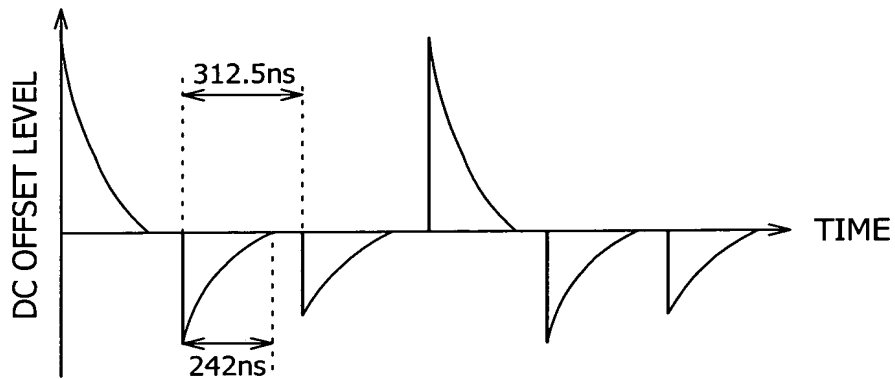


FIG. 23

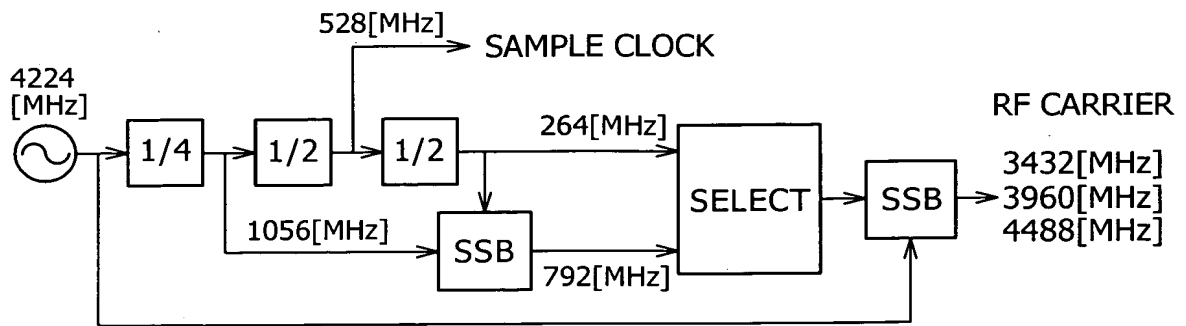


FIG. 24

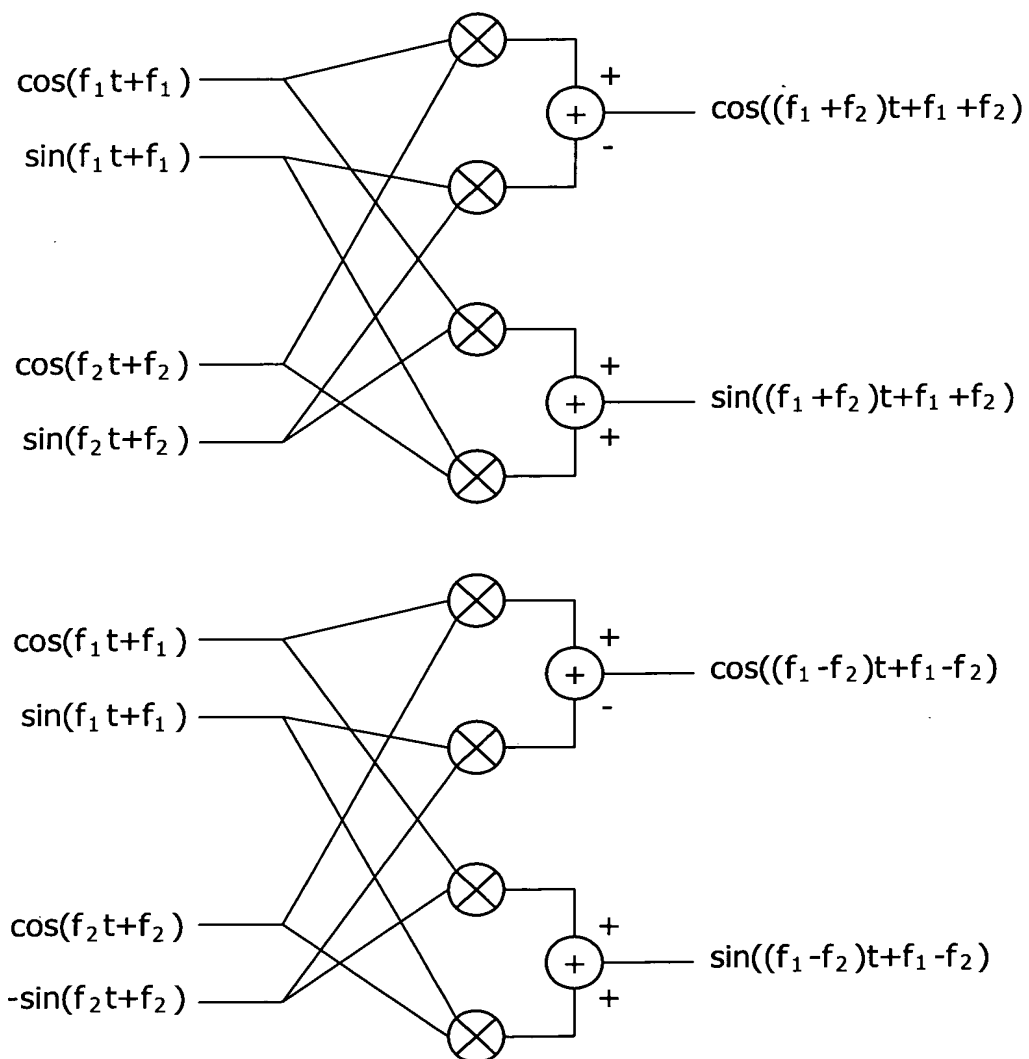


FIG. 25

